European Journal of Phycology

Formerly
British Phycological Journal

Index and Contents to Volume 28
February–November 1993

CAMBRIDGE
UNIVERSITY PRESS

Cambridge University Press

The Pitt Building, Trumpington Street, Cambridge CB2 1RP
40 West 20th Street, New York, NY 10011–4211, USA
10 Stamford Road, Oakleigh, Melbourne, 3166, Australia

© 1994 British Phycological Society

EUROPEAN JOURNAL OF PHYCOLOGY

CONTENTS AND INDEX TO

VOLUME 28

The Council of the British Phycological Society wish it to be understood that they do not accept responsibility for the accuracy of statements published in the *Journal*, excepting when those statements are contained in an official report of the Council.

Number 1, pp. 1–76, February 1993
Number 2, pp. 77–140, May 1993
Number 3, pp. 141–201, August 1993
Number 4, pp. 203–286, November 1993

ARSALANE, W., PARÉSYS, G., DUVAL, JEAN-CLAUDE, WILHELM, C., CONRAD, R. and BÜCHEL, C. A new fluorometric device to measure the *in vivo* chlorophyll *a* fluorescence yield in microalgae and its use as a herbicide monitor 247

BATES, M.J. *see* KAIN (JONES) and BATES 173

BEESON, JR., R.C. *see* MOUGET, BEESON, JR, LEGENDRE and DE LA NOÜE 99

BREEMAN, A.M. Photoperiodic history affects the critical daylength of the short-day plant *Acrosymphyton purpuriferum* (Rhodophyta) 157

BROADY, P.A. and INGERFELD, M. Three new species and a new record chaetophoracean (Chlorophyta) algae from terrestrial habitats in Antarctica 25

BRODIE, J., GUIRY, M.D. and MASUDA, M. Life history, morphology and crossability of *Chondrus ocellatus* forma *ocellatus* and *C. ocellatus* forma *crispoides* (Gigartinales, Rhodophyta) from the north-western Pacific 183

BÜCHEL, C. *see* ARSALANE, PARÉSYS, DUVAL, WILHELM, CONRAD and BÜCHEL 247

CACERES, E.J. *see* PARODI and CACERES 69

CASTENHOLZ, R.W. *see* VINCENT, DOWNES, CASTENHOLZ and HOWARD-WILLIAMS 213

CHIANG, YOUNG-MENG *see* GALL, CHIANG and KLOAREG 277

CLAYTON, M.N. *see* PHILLIPS and CLAYTON 123

COESEL, P.F.M. Poor physiological adaptation to alkaline culture conditions in *Closterium acutum* var. *variabile*, a planktonic desmid from eutrophic waters 53

COLE, K.M. *see* SHEATH, KACZMARCZYK and COLE 115

COLE, K.M. *see* SHEATH, VIS and COLE 231

CONRAD, R. *see* ARSALANE, PARÉSYS, DUVAL, WILHELM, CONRAD BÜCHEL 247

DALE, B., MONTRESOR, M., ZINGONE, A. and ZONNEVELD, K. The cyst-motile stage relationships of the dinoflagellates *Diplopelta symmetrica* and *Diplopsalopsis latipeltata* 129

DAUGBJERG, N. and MOESTRUP, Ø. Four new species of *Pyramimonas* (Prasinophyceae) from arctic Canada including a light and electron microscopic description of *Pyramimonas quadrifolia* sp. nov. 3

DE LA NOÜE, J. *see* MOUGET, BEESON JR, LEGENDRE and DE LA NOÜE 99

DE PERIBONIO, R.G. *see* NAVARRO and DE PERIBONIO 167

DODGE, J.D. *see* TORIUMI and DODGE 39

DONG, L.F. *see* MERRETT, DONG and NIMER 243

DOWNES, M.T. *see* VINCENT, DOWNES, CASTENHOLZ and HOWARD-WILLIAMS 213

DUVAL, JEAN-CLAUDE *see* ARSALANE, PARÉSYS, DUVAL, WILHELM, CONRAD and BÜCHEL 247

FERNÁNDEZ, J.A. *see* FLORES-MOYA, FERNÁNDEZ and XAVIER NIELL 223

FLORES-MOYA, A., FERNÁNDEZ, J.A. and XAVIER NIELL, F. Reproductive phenology, growth and primary production of *Phyllariopsis purpurascens* (Phyllariaceae, Phaeophyta) from the Straits of Gibraltar 223

FLYNN, K.J., ZAPATA, M., GARRIDO, J.L., ÖPIK, H. and HIPKIN, C.R. Changes in carbon and nitrogen physiology during ammonium and nitrate nutrition and nitrogen starvation in *Isochrysis galbana* 47

FOARD, H.J. *see* HUISMAN, FOARD and KRAFT 145

FOWLER, M.W. *see* IQBAL, GREY, STEPAN-SARKISSIAN and FOWLER 63

FOY, R.H. and GIBSON, C.E. The influence of irradiance, photoperiod and temperature on the growth kinetics of three planktonic diatoms 203

FURNARI, G. and SERIO, D. The reproductive structures of the Mediterranean alga *Laurencia pelagosae* (Ceramiales, Rhodophyta) 141

GALL, ERWAN AR, CHIANG, YOUNG-MENG and KLOAREG, B. Isolation and regeneration of protoplasts from *Porphyra dentata* and *Porphyra crispata* 277

GARRIDO, J.L. *see* FLYNN, ZAPATA, GARRIDO, ÖPIK and HIPKIN 47

GIBSON, C.E. *see* FOY and GIBSON 203

GREY, D. *see* IQBAL, GREY, STEPAN-SARKISSIAN and FOWLER 63

GUIRY, M.D. *see* BRODIE, GUIRY and MASUDA 183

HEIMANN, K. *see* SENSEN, HEIMANN and MELKONIAN 93

HIPKIN, C.R. *see* FLYNN, ZAPATA, GARRIDO, OPÏK and HIPKIN 47

HOOGVELD, H.L. and MOED, J.R. A digitising tablet for determining the length distribution of filamentous cyanobacteria 59

HOWARD-WILLIAMS, C. *see* VINCENT, DOWNES, CASTENHOLZ and HOWARD-WILLIAMS 213

HUISMAN, J.M., FOARD, H.J. and KRAFT, G.T. *Semnocarpa* gen. nov. (Rhodophyta: Rhodymeniales) from southern and western Australia 145

INGERFELD, M. *see* BROADY and INGERFELD 25

IQBAL, M., GREY, D., STEPAN-SARKISSIAN, G. and FOWLER, M.W. Interactions between the unicellular red alga *Porphyridium cruentum* and associated bacteria 63

30 752H1 XL 1990
10/94 31249-150

JONES, R.I. *see* OJALA and JONES 17

JOUANNIC, S. *see* MARTIN, JOUANNIC and LOISEAUX-DE GOËR 111

JUNIPER, B.E. *see* McLEAN and JUNIPER 33

KACZMARCZYK, D. *see* SHEATH, KACZMARCZYK and COLE 115

KAIN (JONES), J.M. and BATES, M.J. The reproductive phenology of *Delesseria sanguinea* and *Odonthalia dentata* off the Isle of Man 173

KALVAS, A. and KAUTSKY, L. Geographical variation in *Fucus vesiculosus* morphology in the Baltic and North Seas 85

KAPRAUN, D.F. Karyology and cytophotometric estimation of nuclear DNA content variation in *Gracilaria*, *Gracilariopsis* and *Hydropuntia* (Gracilariales, Rhodophyta) 253

KAUTSKY, L. *see* KALVAS and KAUTSKY 85

KLOAREG, B. *see* GALL, CHIANG and KLOAREG 277

KRAFT, G.T. *see* HUISMAN, FOARD and KRAFT 145

LEGENDRE, L. *see* MOUGET, BEESON JR, LEGENDRE and DE LA NOÜE 99

LING, H.U. and SEPPELT, R.D. Snow algae of the Windmill Islands, continental Antarctica. 2. *Chloromonas rubroleosa* sp. nov. (Volvocales, Chlorophyta), an alga of red snow 77

LOISEAUX-DE GOËR, S. *see* MARTIN, JOUANNIC and LOISEAUX-DE GOËR 111

McLEAN, B. and JUNIPER, B.E. The arrangement of actin bundles and chloroplasts in the nodal regions of Characean internodal cells 33

MARTIN, W.F., JOUANNIC, S. and LOISEAUX-DE GOËR, S. Molecular phylogeny of the *atp*B and *atp*E genes of the brown alga *Pylaiella littoralis* 111

MASUDA, M. *see* BRODIE, GUIRY and MASUDA 183

MEDLIN, L.K., WILLIAMS, D.M. and SIMS, P.A. The evolution of the diatoms (Bacillariophyta). I. Origin of the group and assessment of the monophyly of its major divisions 261

MELKONIAN, M. *see* SENSEN, HEIMANN and MELKONIAN 93

MENESES, I. Foam as a dispersal agent in the rocky intertidal of central Chile 107

MERRETT, M.J., DONG, L.F. and NIMER, N.A. Nitrate availability and calcite production in *Emiliania huxleyi* Lohmann 243

MOED, J.R. *see* HOOGVELD and MOED 59

MOESTRUP, Ø. *see* DAUGBJERG and MOESTRUP 3

MONTRESOR, M. *see* DALE, MONTRESOR, ZINGONE and ZONNEVELD 129

MOUGET, JEAN-LUC, BEESON, JR, R.C., LEGENDRE, L. and DE LA NOÜE, J. Inadequacy of Rubisco initial and total activities to account for observed rates of photosynthetic carbon dioxide assimilation by *Scenedesmus ecornis* 99

NAVARRO, J.N. and DE PERIBONIO, R.G. A light and scanning electron microscope study of the centric diatom *Polymyxus coronalis* (Bacillariophyta) 167

NIMER, N.A. *see* MERRETT, DONG and NIMER 243

OJALA, A. and JONES, R.I. Spring development and mitotic division pattern of a *Cryptomonas* sp. in an acidified lake 17

ÖPIK, H. *see* FLYNN, ZAPATA, GARRIDO, ÖPIK and HIPKIN 47

PARÉSYS, G. *see* ARSALANE, PARÉSYS, DUVAL, WILHELM, CONRAD and BÜCHEL 247

PARODI, E.R. and CÁCERES, E.J. Life history of freshwater populations of *Rhizoclonium hieroglyphicum* (Cladophorales, Chlorophyta) 69

PHILLIPS, J.A. and CLAYTON, M.N. Comparative flagellar morphology of spermatozoids of the Dictyotales (Phaeophyceae) 123

SENSEN, C.W., HEIMANN, K. and MELKONIAN, M. The production of clonal and axenic cultures of microalgae using fluorescence-activated cell sorting 93

SEPPELT, R.D. *see* LING and SEPPELT 77

SERIO, D. *see* FURNARI and SERIO 141

SHEATH, R.G., KACZMARCZYK, D. and COLE, K.M. Distribution and systematics of freshwater *Hildenbrandia* (Rhodophyta, Hildenbrandiales) in North America 115

SHEATH, R.G., VIS, M.L. and COLE, K.M. Distribution and systematics of the freshwater red algal family Thoreaceae in North America 231

SIMS, P.A. *see* MEDLIN, WILLIAMS and SIMS 261

STEPAN-SARKISSIAN, G. *see* IQBAL, GREY, STEPAN-SARKISSIAN and FOWLER 63

TORIUMI, S. and DODGE, J.D. Thecal apex structure in the Peridiniaceae (Dinophyceae) 39

VAN TUSSENBROEK, B.I. Plant and frond dynamics of the giant kelp, *Macrocystis pyrifera*, forming a fringing zone in the Falkland Islands 161

VINCENT, W.F., DOWNES, M.T., CASTENHOLZ, R.W. and HOWARD-WILLIAMS, C. Community structure and pigment organisation of cyanobacteria-dominated microbial mats in Antarctica 213

WILHELM, C. *see* ARSALANE, PARÉSYS, DUVAL, WILHELM, CONRAD and BÜCHEL 247

WILLIAMS, D.M. *see* MEDLIN, WILLIAMS and SIMS 261

VIS, M.L. *see* SHEATH, VIS and COLE 231

XAVIER NIELL, F. *see* FLORES-MOYA, FERNANDEZ and XAVIER NIELL 223

ZAPATA, M. *see* FLYNN, ZAPATA, GARRIDO, ÖPIK and HIPKIN 47

ZINGONE, A. *see* DALE, MONTRESOR, ZINGONE and ZONNEVELD 129

ZONNEVELD, K. *see* DALE, MONTRESOR, ZINGONE and ZINGONE 129

BOOK REVIEWS

Algae and Symbioses: Plants, Animals, Fungi, Viruses, Interactions Explored. By W. REISSER (Editor) 201

Progress in Phycological Research. Volume 8. By F. E. ROUND and D. J. CHAPMAN (Editors) 200

Seaweeds of the British Isles. Volume 1 Rhodophyta Part 3A Ceramiales. By CHRISTINE A. MAGGS and MAX H. HOMMERSAND 285

The Biology of Free-living Heterotrophic Flagellates. The Systematics Association Special Volume No. 45. By D. J. PATTERSON and J. LARSEN (Editors) 199

The Diatom Types of Heinrich Heiden in Heiden & Kolbe 1928. Bibliotheca Diatomologica, Volume 24. By R. SIMONSEN 199

Type Collections of Corallines (Rhodophyta) in the Foslie Herbarium (TRH). By W. J. WOELKERLING 286